California Regional Water Quality Control Board
Santa Ana Region

December 5, 1997

ITEM: 25

SUBJECT: Executive Officer's Report

DISCUSSION:

1. **Mt. Baldy Village Water Quality Survey** - In July, 1997, Board staff were advised of alleged improper waste disposal practices involving a septic tank system serving Mt. Baldy Village. San Antonio Creek, which runs through the village adjacent to the location of the septic tank, provides part of the potable water supplies distributed by the City of Upland and by Mt. San Antonio Water Company. The Los Angeles/San Bernardino County line, which is also the boundary between the Santa Ana and Los Angeles Regions, also runs through Mt. Baldy Village.

   In early August, staff from both regions conducted an inspection of the Mt. Baldy Village community septic tank system, accompanied by the complainant who raised the concern alleging improper waste disposal practices. During that inspection, it became apparent that the allegations stemmed, at least in part, from a land ownership dispute between a real estate developer and the San Antonio Canyon Mutual Service Company, the operator of the community septic tank system. On September 5, 1997, Mark Adelson, Steve Mayville and I met with representatives of the City of Upland, Mt. San Antonio Water Company, the State Department of Health Services, and San Antonio Canyon Mutual Service Company and participated in a joint inspection of the septic tank system and surrounding area. Although of an unconventional design, the system appeared to be functioning properly. I then directed that a followup sampling investigation be conducted to generate data concerning whether the subject system was failing.

   Later in September, Board staff, assisted by staff of Mt. San Antonio Water Company, conducted a limited water quality sanitary study of the creek as it runs through the village, including the creek adjacent to the septic tank system. Department of Health Services and Board staff have reviewed the analytical results of this study, and agree that the results show no evidence of contamination of San Antonio Creek by the septic tanks. These conclusions have been conveyed to the City of Upland and Mt. San Antonio Water Company.

2. **Bay Protection and Toxic Cleanup Program: Development of Proposed Regional Toxic Hot Spot Cleanup Plans -** In 1989, The California State legislature established the Bay Protection and Toxic Cleanup Program (BPTCP). The BPTCP has four major goals: (1) to provide protection of present and future beneficial uses of the bays and estuarine waters of California; (2) to identify and characterize toxic hot spots; (3) to plan for toxic hot spot cleanup or other remedial or mitigation actions; and (4) to develop prevention and control strategies for toxic pollutants that will prevent creation of new toxic hot spots or the perpetuation of existing ones within the bays and estuaries of the State. As a result of controversy surrounding funding for this program, BPTCP has been the subject of considerable political visibility and recent legislation. Even though he has vetoed recent relevant legislation, the governor has recently mandated that the cleanup plans required under the original program legislation will be prepared by the State and regional boards.

   One of the mandates of the BPTCP is for the Regional Boards to submit Regional Toxic Hot Spot Cleanup Plans by January 1, 1998. Staff is developing a proposed plan that addresses an identified Toxic Hot Spot in Newport Bay (Rhine Channel). This Plan also includes a specific definition of a Toxic Hot Spot, site ranking criteria, ranked lists of Candidate Toxic Hot Spots, and, for the high priority sites, descriptions of possible actions to remediate sites, sources of pollution and other Water Code requirements. We will submit the proposed Regional Toxic Hot Spot Cleanup Plan to the State Water Resources Control Board before January 1, 1998.

3. **Water Quality Coordinating Committee (WQCC) Meeting** – The San Diego Regional Board (Region 9) hosted the latest WQCC meeting on November 13 and 14, 1997. Region 9 staff should be commended on the excellent arrangements they made for the meeting. Breakout sessions included presentations on dairy regulatory problems in the Central Valley and North Coast Regions, stormwater issues statewide, and lively discussions on the fuels cleanup and containment zone policies.

   The containment zone policy continued to generate significant friction between some regional and State Board members. Some regional board members feel that a number of changes recommended by a committee of regional board members (Chairwoman Henriques participated on this committee) should be incorporated into the policy. The State Board has not yet indicated its willingness to do so. This is an extremely low priority matter for the Santa Ana Region, and it seems that an inordinate amount of time and resources have been expended in the development of the original policy and in the efforts of a few of the regional boards to seek changes to the policy.

   Another source of friction at the WQCC was the fuels policy (or the lack of one). MTBE now appears to be the major area of concern. Some regional board

members suggested that the State Board should assume a leadership role in addressing the use of MTBE and in identifying how cleanup standards will be set. Unfortunately, this matter has now become highly politicized, just as were the recommendations in the Lawrence Livermore Laboratories report concerning the cleanup of non-MTBE leaking fuel tanks. Lawrence Livermore Laboratories have again been contracted by the State Board, and they have been asked to review the problem of site cleanups where MTBE is present. We understand that the Lawrence Livermore staff doing the current review are expected to have dramatically different recommendations for the cleanup standards and procedures for sites where MTBE is present than was the case for non-MTBE sites. The solubility of MTBE, the widespread areas in which it has been found, and the dramatically high concentrations are all of significant concern to regional board staff. State Board Chair Caffrey suggested that a cleanup standard for MTBE sites was not expected in the near future. All regional boards will have to continue reviewing site characterization and closure plans on a case-by-case basis until a State Board policy is generated. However, some have suggested that a State Board standard may be set as appeals of regional board decisions must be taken up by the State Board, and if the Board acts on any of these appeals, that action will have the effect of setting precedent.

The breakout presentation at the WQCC concerning dairy regulatory activities was of significant interest. I have previously sent to you copies of newspaper articles concerning dairy regulatory problems in the Central Valley. It should be noted that the problems identified in the newspaper articles were generated by dairies with a density of 2 to 5 animals per acre. Our dairies have animal concentrations of 25 animals per acre. The Central Valley has approximately 1,000,000 dairy animals versus our 400,000, but their animal concentrations range from 8 to 20 percent of what your regulatory staff deals with in the Chino Basin. In addition, your staff must deal with the urbanization in Chino and Ontario which is responsible for flooding out the Chino Basin dairies on a regular basis. The North Coast Regional Board also made a presentation concerning their dairy regulatory program. The program described for that region was for 4,000 animals on 6,000 dairy acres, a density of .67 animals per acre.

4. **Status Report on Cleanup of General Electric Flatiron Facility, Ontario -** General Electric (GE) has completed five phases of investigations to assess hydrogeological conditions and soil and groundwater chemistry at the former GE Flatiron facility located at 234 East Main Street, Ontario. These investigations have delineated the lateral and vertical extent of the trichloroethylene (TCE) contaminant plume. The lateral extent of TCE concentrations in groundwater that exceed the Maximum Contaminant Level (MCL) for drinking water (5 ppb), appears to be defined by a plume approximately 1.5 miles long by 0.5 miles wide. The maximum vertical extent of the TCE plume is approximately 185 feet below the water table (500 feet below ground surface). The plume is located in the Chino Groundwater Basin. Chromium is also present in the plume at

concentrations above its MCL. This plume is one of the largest and most significant in our region.

In December 1993, staff approved GE's proposed interim remedial measure (IRM). The IRM included strategies for containment of the impacted groundwater. The IRM has been implemented and includes extraction of groundwater from a well which was installed at the toe of the plume. Groundwater extraction at the IRM well started in June 1996. Approximately 860,000 gallons per day (gpd) of groundwater are being extracted and treated by liquid-phase granular activated carbon. The treated groundwater is discharged through a pipeline to the Ely Basins for aquifer recharge. On May 30, 1997, the groundwater extraction and treatment system was shut down and the discharge to the Ely Basins was suspended in order to accommodate the San Bernardino Flood Control District's need to deepen the basins. This work has been completed, and on October 13, 1997, the IRM was put back into full operation. In order to recapture the contaminants that migrated down gradient of the extraction well during the temporary shut down of the system, groundwater will be extracted and treated at an accelerated rate (approximately 1,225,000 gpd) for the next nine to ten months.

On May 5, 1995, staff approved the Feasibility Study Report (FSR) for the site. The FSR summarized and evaluated six remedial action alternatives for the cleanup of impacted soil and groundwater associated with the former GE facility. The selected alternative includes capping the contaminated soil at the location of the former facility as site redevelopment takes place, removal and treatment of high concentrations of TCE and other volatile organic compounds from shallow soil using soil vapor extraction and granular activated carbon, and extraction and treatment of groundwater from two extraction wells (the IRM well for plume containment purposes and a second well to be located in the interior of the plume for TCE mass removal).

In June 1997, GE submitted a revised draft Remedial Action Plan (RAP) based on the approved Feasibility Study Report. The RAP contains preliminary plans for the design, construction, and operation of the proposed remedial actions for soil and groundwater. Staff and GE will conduct a public hearing on the draft RAP in order to solicit comments from the public and seek input from the surrounding community. A Fact Sheet is being prepared to inform the public of the current site conditions and the proposed RAP. The fact sheet will be circulated to about 5,000 residences in the immediate area of the project. A public hearing is necessary in order to comply with federal Resource Conservation and Recovery Act (RCRA) requirements, since a portion of the facility was previously regulated by the California Department of Toxic Substances Control as a RCRA site. This will be the first public hearing of this type that staff has conducted. Staff expects that the Fact Sheet will be distributed in early January 1998, and that the public hearing will be conducted in late January or early February.

5. **Status Report on Cleanup of Lockheed Plume** - On September 11, 1997, the Board conducted a public workshop to solicit comments on Lockheed Martin's containment work plan and time schedule for the trichloroethylene (TCE) plume in the Redlands/Loma Linda area of the Bunker Hill Groundwater Basin. The work plan and time schedule were submitted in response to Cleanup and Abatement Order (CAO) No. 94-37. At the conclusion of the workshop, the Board concurred with my recommendation to approve Alternative 5, which includes pumping and treating existing wells to assure that TCE from the plume does cause water delivered to customers to exceed the detection level of 0.5 ppb. As a result, in a letter to Lockheed Martin dated September 29, 1997, I approved Alternative 5. Lockheed Martin is currently performing the initial tasks associated with Alternative 5, although full implementation of Alternative 5 will not be completed until the City of Riverside and Lockheed Martin negotiate a water supply contingency agreement. TCE from Lockheed Martin's plume has not yet reached the City of Riverside's production wells. However, TCE is present in monitoring wells installed by Lockheed Martin that are located approximately 3000 feet up gradient of Riverside's wells. In a letter dated October 15, 1997, I approved Lockheed Martin's Task 3 work plan which includes the installation of additional monitoring wells closer to Riverside's wells. These monitoring wells will further define the leading edge of the plume and provide data for Lockheed Martin's modeling efforts associated with implementation of Alternative 5. Installation of the wells will begin in about 4 weeks.

On July 18, 1997, the Board adopted CAO No. 97-58, requiring Lockheed Martin to perform certain tasks associated with the perchlorate plume, which was not known to exist until an improved analytical method detected perchlorate in the groundwater earlier this year. The perchlorate plume has been determined to be larger than the TCE plume. Perchlorate has already been detected in most of Riverside's Gage System wells at concentrations generally below the drinking water Provisional Action Level of 18 ppb. The Gage System wells provide about 40% of Riverside's water supply. In accordance with the CAO , Lockheed Martin submitted a work plan and time schedule on August 15. The objective of the work plan was to obtain information necessary to develop and implement a remedial action plan for the perchlorate plume (treatment technologies to effectively remove perchlorate do not currently exist) . The work plan summarized various ongoing tasks that had been initiated, and provided proposed dates for submittal of future status reports regarding the various tasks. I approved the work plan on October 31. In accordance with the approved work plan, a Perchlorate Technology Applicability Report , documenting the most recent results of an ongoing review of treatment technologies that may have some future potential for removing perchlorate from groundwater, was submitted on November 15. Staff will continue to monitor Lockheed Martin's efforts in this regard.

Lockheed Martin and the water purveyors are continuing in their efforts to develop water supply contingency agreements. As you are aware, water supply wells for the Victoria Farms Mutual Water Company have already been shut down, and Lockheed Martin has connected the water company to the City of San Bernardino's water distribution system. Lockheed Martin is continuing to develop and implement several projects with the City of Loma Linda as they continue to negotiate a final water supply agreement. For example, on November 12, Lockheed Martin agreed to connect an additional well to Loma Linda's water distribution system at a cost of about $411,000. Lockheed Martin and the City of Riverside began negotiating an agreement for TCE earlier this year, and a draft agreement was prepared in May. However, as a result of unsuccessful attempts to resolve several issues in the draft agreement, and the discovery of perchlorate which complicated matters even further, negotiations have essentially been stalled since then. In October, Lockheed Martin and the City of Riverside agreed to resume formal negotiations and designated more senior level negotiation teams to continue the process. On November 20, Board staff met with representatives of Lockheed Martin and the City of Riverside to develop the framework for the formal negotiations which are expected to commence in the near future.

Gerard J. Thibeault
Executive Officer